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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,796	11/25/2003	Phui Qui Nguyen	FA1216USNA	8238

23906 7590 11/21/2005

E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
BARLEY MILL PLAZA 25/1128
4417 LANCASTER PIKE
WILMINGTON, DE 19805

EXAMINER	
TSOY, ELENA	

ART UNIT	PAPER NUMBER
1762	

DATE MAILED: 11/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/722,796	NGUYEN ET AL.	
	Examiner	Art Unit	
	Elena Tsoy	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 September 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,8 and 9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8 and 9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

Amendment filed on 9/22/2005 has been entered. Claims 7 and 10 have been cancelled. New claims have been added. Claims 1-6, 8-9 are pending in the application.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Provisional rejection of claims 1-6, 8-9 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of copending Application No. 10/171,206 in view of Wu et al (US 6,039,872) has been withdrawn due to filing a terminal disclaimer.

3. Provisional rejection of claims 1-6, 9 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of copending Application No. 10/171,207 in view of Wu et al (US 6,039,872) has been withdrawn due to filing a terminal disclaimer.

4. Provisional rejection of claims 1-6, 9 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5, 8-12 of copending

Application No. 10/426,601 in view of Wu et al (US 6,039,872) has been withdrawn due to filing a terminal disclaimer.

5. Provisional rejection of claims 1-6, 9 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4, 6-8 of copending Application No. 10/643,598 in view of Wu et al (US 6,039,872) has been withdrawn due to filing a terminal disclaimer.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 3, 5-6 stand rejected under 35 U.S.C. 102(b) as being anticipated by Mizutani et al (US 5,780,530) and Wu et al (US 6,039,872) for the reasons of record set forth in paragraph 7 of the Office Action mailed on 6/20/2005.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-6, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizutani et al (US 5,780,530) in view of Wu et al (US 6,039,872) for the reasons of record set forth in paragraph 9 of the Office Action mailed on 6/20/2005.

10. Claims 1-6, 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaglani in view of Murase in view of Wu et al or Maag et al in view of Gaglani in view of Wu et al, further in view of Bergstrom et al (US 6,384,125) for the reasons of record set forth in paragraph 12 of the Office Action mailed on 6/20/2005.

Response to Arguments

11. Applicants' arguments filed on 9/22/2005 have been fully considered but they are not persuasive.

(A) Applicants argue that even if radical polymerization of double bonds may occur by initiation with thermal energy as asserted by the Examiner, there is no indication in Mizutani el al that the optionally present C=C double bonds are polymerized via radical polymerization to cure the coating composition. Nothing in Mizutani et al. indicates that the coating compositions therein are cured by radical polymerization, and the mere fact that radical polymerization may occur by heat does not rise to the level evidence tending to show inherency. Indeed, the intrinsic evidence in Mizutani el al itself confirms Applicants' position. For example, radical polymerization initiated by thermal energy requires thermal radical initiators. Mizutani el al, however, fail to disclose any thermal initiators. Thus, Applicants respectfully submit that curing via radical polymerization is not disclosed either expressly or inherently in Mizutani el al.

The Examiner respectfully disagrees with this argument. The Applicants' statement that "radical polymerization initiated by thermal energy requires thermal radical initiators" is not correct. It is well known in the art that thermal initiators may be **optionally** combined with unsaturated compounds to initiate free-radical polymerization of the unsaturated compounds in thermal curing, as evidenced by US 20040110856 to Young et al (See P45). Therefore, heating of unsaturated compounds in Mizutani el up to 240^0C would certainly trigger radical polymerization of the unsaturated compounds even in the absence of thermal initiators.

(B) Applicants submit that the Examiner has failed to establish a prima facie case of obviousness. Gaglani is not directed to a process for the coating of vehicles because Gaglani discloses a process for protective covering over automobile printed circuit board. Murase is directed solely to powder coating compositions (see column 1, lines 5-10). Gaglani, on the other hand, is directed solely to solvent-free, low viscosity liquid compositions (see column 2, lines 63-67).

The Examiner respectfully disagrees with this argument. The automobile printed circuit board of Gaglani can be *broadly* interpreted as a vehicle *part* as claimed.

Murase is NOT directed *solely* to powder coating compositions (see column 1, lines 5-10). In contrast to Applicants statement, Murase teaches: "When metal, wood, plastics or other substrates are coated for decorative or protective purposes with **usual** coating compositions *including* powder coating compositions, it is more preferable to apply at least two coating compositions of different properties in a plurality of coats than to repeatedly apply a single composition to the desired thickness." (See column 1, lines 21-27).

(C) Applicants argue that the claimed invention is nonobvious over Maag in view of Gaglani. The second curing mechanism of Maag et al. is different from that claimed in the present invention. In Applicants' claim 1 invention, the second curing mechanism is the moisture curing (hydrolysis) of alkoxysilane groups (see page 4, lines 19-23 of Applicants' specification), whereas in Maag et al. the second curing mechanism is a polycondensation or addition reaction between complementary reactive functional groups (see column 4, line 63 – column 5, line 53). Thus, the disclosure of Maag el al teaches away from the Applicants' claimed second curing mechanism.

The Examiner respectfully disagrees with this argument. First of all, in contrast to Applicants statement, the second curing mechanism described at column 4, line 63 – column 5, line 53 of Maag et al is NOT a polycondensation or addition reaction between complementary reactive functional groups. Instead, Maag et al teach that in the systems curable by **condensation** reactions (See column 4, lines 63-66) **NO restrictions** apply to the binder (See column 5, lines 7-8). Therefore, a UV-curable **polyurethane** (meth)acrylate binder of Calgani having alkoxysilane groups which are cured by **condensation** upon exposure to moisture would be a suitable binder of Maag et al.

(D) Applicants state that the OH groups mentioned in Bergstrom et al. are part of the SiOH groups, whereas in the present invention, in addition to the alkoxysilane groups (-Si(OR)a), single OH groups are present, linked to the backbone of the binder, and are not hydrolysable. Unlike the hydroxyl groups in the present invention, the hydroxyl groups in Bergstrom et al. participate in curing.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **single OH groups linked to the backbone of the binder that do not participate in curing**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Thursday, 9:00AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423[redacted]. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ELENA TSOY
PRIMARY EXAMINER
ETsoy

Elena Tsoy
Primary Examiner
Art Unit 1762

November 16, 2005